



# COMPUTER TOOLS

## for Planning, Conservation & Environmental Protection

Article 9

In an effort to increase awareness of Internet resources available to local governments and citizen planners the Wisconsin Department of Natural Resources (DNR) has initiated a technical assistance program focused on computer tools for planning, conservation, and environmental protection. This program has been made possible by a water quality management grant awarded to the DNR by the U.S. Environmental Protection Agency (EPA).

As part of our technical assistance program we have developed this series of articles. **Each article will highlight a different tool, discuss its possible uses, and offer step-by-step tutorials.** It is our hope that the information provided here will insure that all involved in local planning processes have equal access to valuable information and analysis tools. Gaining access to these free web-based planning tools will assist communities with preliminary selection of alternative approaches to watershed and community planning. When community planners, developers, and citizens have access to similar information they are more readily able to interact and jointly discover possible solutions to land use issues.

This series of articles can be found online at <http://dnr.wi.gov/org/es/science/landuse/CompTools/local.htm>

### Definition of a Tool – Interactive Mapping

To help evaluate the available tools, we have sorted them into three categories-tools for finding and accessing data, tools for making maps, and tools for predicting impacts. This article focuses on tools for making maps.

The development and availability of web-mapping software in the late 1990s spawned a proliferation of Internet sites that enable citizens to access government-maintained data and information useful in local environmental protection and planning. The resulting interactive data mapping tools allow people to access downloadable data, integrate that data spatially, zoom-in on areas of interest, query the associated databases, search for selected data, and produce customizable maps. Since the mapping tools are data driven, they access “real time” data and ensure the most current information is used (i.e. as the data and databases used to create the maps are updated and change, so do the maps).

Maps add a visual element to the planning process and can be an effective way to communicate

consequences of land use decisions. Such tools enhance community participation when people can see potential changes in relation to where they live.

### Wisconsin DNR - Dam Safety Program

There are approximately 3,800 dams in Wisconsin. Since the late 19th Century, more than 700 dams have been built, then washed out or removed. Since 1967, approximately 100 additional dams have been removed.

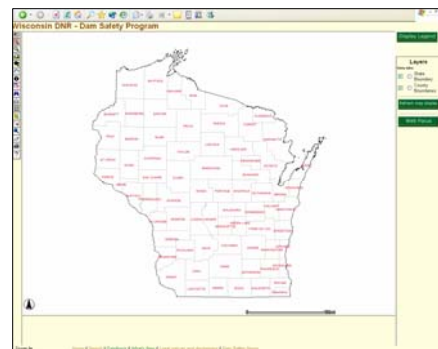
Almost 60% of the dams in Wisconsin are privately owned, 9% by the State, 17% are municipally owned by a local government, and 14% by other ownership types.

The Dam Safety Program's interactive map allows you to access the Wisconsin DNR's dam inventory and also allows dam locations to be viewed over aerial photographs (for all but six counties) or U.S.G.S. topographic maps. Photos of many dams throughout the state are also made available through this application.

Hazard classification of each dam can be obtained through this interactive map. Dams are classified as low, significant, or high hazard. A dam is assigned a rating of high hazard when its failure would put lives at risk. The hazard rating is not based on the physical attributes, quality, or strength of the dam itself, but rather the potential for loss of life or property damage should the dam fail.

### To Use Wisconsin DNR Dam Safety

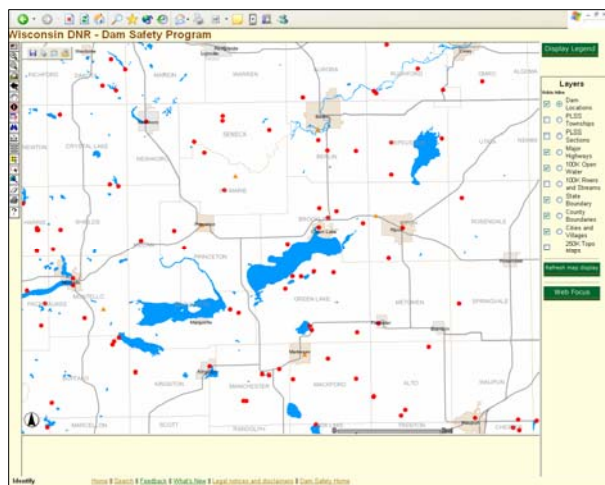
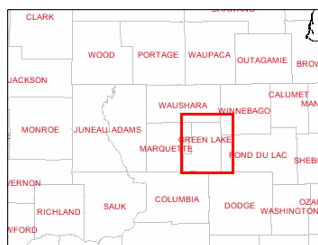
Using your Internet browser, go to <http://maps.dnr.state.wi.us/dams/viewer.htm>



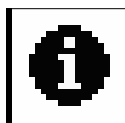
1. Choose the <Zoom In> tool.



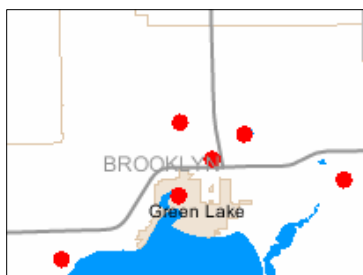
2. Click, hold, and drag cursor on map to draw a box around the area of interest.



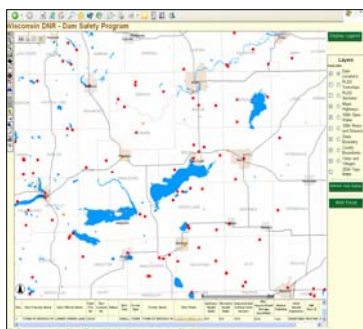
3. Choose the <Identify> tool.



4. Click the dam location on the map.



5. Information about the dam will be displayed in the window below the main map area.

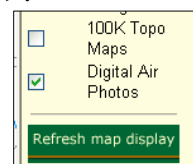


Owner Name	Dam Photo	Hydraulic Height (feet)
TOWN OF BROOKLYN	<a href="#">0120812159302.JPG</a>	6.0

6. If a photo of the dam is available, a link will be present in the Dam Photo column of the table. Click this link to view the photo.



To view digital air photos or topographic maps for the area, check the box for which layer you would like to make visible, then click <Refresh map display>.



### For More Information:

[www.dnr.state.wi.us/org/es/science/landuse](http://www.dnr.state.wi.us/org/es/science/landuse)  
WDNR's land use website



Article prepared by R. Chris Welch and Dan Bellrichard  
Bureau of Integrated Science Services  
Wisconsin Department of Natural Resources  
[robert.welch@dnr.state.wi.us](mailto:robert.welch@dnr.state.wi.us)  
[daniel.bellrichard@dnr.state.wi.us](mailto:daniel.bellrichard@dnr.state.wi.us)

